

AMENDMENTS TO THE CLAIMS

This listing of claims supercedes all prior versions and listings of claims in this application:

LISTING OF CLAIMS:

1. (Currently Amended): A transmission diversity type transmitter comprising:
plural transmission units, each transmission unit comprising a delay circuit for delaying a signal and a detector for detecting an RF signal which is based on the signal delayed by said delay circuit, the RF signal transmitting from each transmission unit;
a comparator for receiving detection signals output from two detectors of two transmission units of said plural transmission units, comparing the detection signals and outputting a comparison signal; and
a delay amount control circuit for controlling said delay circuits on the basis of the comparison signal so that modulation timing of RF signals to be transmitted from said two transmission units are coincident to each other ~~in which the same modulation waves are transmitted from plural transmission units at the same time by delaying a base band signal with delay circuits, and the modulation timing is made coincident among the modulation waves at a reception point to achieve a diversity gain, the transmitter comprising:~~
~~a detector for detecting an RF signal of each transmission unit and outputting a detection signal;~~

~~a comparator for comparing detection signals output from the two detectors of two transmission units in said plural transmission units and outputting a comparison signal, and~~

~~a delay amount control circuit for controlling the delay circuits of said transmission units on the basis of the comparison signal output from said comparator so that the modulation timing is coincident at the transmission output terminals of said two transmission units.~~

2. (Cancelled)

3. (Currently Amended): The transmitter as claimed in claim 1, wherein said delay amount control circuit calculates ~~the~~ an average amplitude of the comparison signal output from said comparator, and controls said delay circuits so that the average amplitude is equal to or lower than a threshold value, whereby the difference in delay time between said two transmission units is converged to ~~a permissible~~ an acceptable value range.

4. (Cancelled)

5. (Currently Amended): The transmitter as claimed in claim 1, wherein each of said plural transmission unit units further comprises ~~a delay circuit~~, a modulator, a frequency converter and an amplifier, and said delay circuit is provided at the input side of said modulator and ~~to which the base band signal is input.~~

6. (Currently Amended): The transmitter as claimed in claim 1, wherein each of said plural transmission units further comprises ~~a delay circuit~~, a modulator, a frequency converter and an amplifier, and said delay circuit is provided between said modulator and said frequency converter.

7. (Currently Amended): The transmitter as claimed in claim 1, wherein each of said plural transmission units further comprises ~~a delay circuit~~, a modulator, a frequency converter and an amplifier, and said delay circuit is provided between said frequency converter and said amplifier.

8. (Currently Amended): The transmitter as claimed in claim 1, wherein each of said plural transmission units further comprises ~~a delay circuit~~, a modulator, a frequency converter and an amplifier, and said delay circuit is provided at the output side of said amplifier.

9. (currently amended) ~~The transmitter as claimed in claim 1,~~ A transmission diversity type transmitter in which the same modulation waves are transmitted from transmission units at the same time by delaying a base band signal with delay circuits, and modulation timing is made coincident among the modulation waves at a reception point to achieve a diversity gain, the transmitter comprising:

a detector for detecting an RF signal of each transmission unit and outputting a detection signal,

a comparator for comparing detection signals output from two detectors of two transmission units in said plural transmission units and outputting a comparison signal, and

a delay amount control circuit for controlling the delay circuits of said two transmission units on the basis of the comparison signal output from said comparator so that the modulation timing is coincident at transmission output terminals of said two transmission units,

wherein the base band signal is subjected to ON/OFF control, the rising timing and falling timing of the detection output when the ON/OFF control is carried out are compared with each other by said comparator, and said delay circuits are controlled by said delay amount control circuit so that the difference between the rising timing and the falling timing is within a permissible time range.

Please add the following new claims 10 and 11:

10. (New): The transmitter as claimed in claim 1, wherein the value range to which the difference in delay time between said two transmission units is converged is specified.

11. (New): A transmission diversity type transmitter comprising:

a first transmission unit comprising a first delay circuit for delaying a signal and a first detector for detecting a first RF signal which is based on the signal delayed by said first delay circuit, said first transmission unit transmitting the first RF signal;

a second transmission unit comprising a second delay circuit for delaying a signal and a second detector for detecting a second RF signal which is based on the signal delayed by said second delay circuit, said second transmission unit transmitting the second RF signal;

a comparator for receiving detection signals output from said first and second detectors, comparing the detection signals and outputting a comparison signal; and

a delay amount control circuit for controlling said first and second delay circuits on the basis of the comparison signal so that modulation timing of the first and second RF signals are coincident to each other.